INTERNATIONAL JOURNAL OF RESEARCH IN BUSINESS AND SOCIAL SCIENCE 9(4)(2020) 404-418

Business & Social Science IJRBS

Research in Business & Social Science

IJRBS VOL 9 NO 4 ISSN: 2147-4478

Available online at www.ssbfnet.com

Journal homepage: https://www.ssbfnet.com/ojs/index.php/ijrbs

Influence of support service linkage strategies on sustainability of donor funded livelihood projects in Kilifi County, Kenya

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ARTICLE INFO

Article history:
Received 20 June 20
Received in revised form 30 June 20
Accepted 03 July 20

Keywords:
Support service linkages, donor funded livelihood projects, training, technological capacity building, resource capacity building

JEL Classification:
Q01, O22, O33

ABSTRACT

Donor agencies have heavily funded livelihood programs in Kilifi County but these projects struggle with sustainability with some dying immediately the funding is withdrawn. The objective of the study was to establish how support service linkage strategies influence sustainability of donor-funded livelihood projects in Kilifi County. The study was guided by Discovery Learning theory; Diffusion of Innovation theory; Lippitt's theory of planned change; and Theory of Stakeholder Management. A descriptive correlational research design was used. A sample size of 170 was selected from a population of 295 from three livelihood projects using Slovin's formula. 7 interviews and 3 focus group discussions were carried out. Prior to data analysis, statistical assumptions were tested. Standard deviations, standard error of means and arithmetic means were used for descriptive analysis while Pearson's Product moment correlation and linear regression, F-tests, and t-tests were used for inferential analysis using statistical package for social sciences. The mean perception of sustainability did not differ significantly with projects (p=0.192), gender (p=0.669), age (p=0.724), and marital status (p=0.284). However, there was a significant difference in mean perception of the sustainability of donor-funded livelihood projects among the different groups based on the highest level of education attained (p=0.011) and duration of stay in the project (p=000162). H0, r=0.383, p=0.000027<0.05 was rejected and concluded that support service linkage strategies significantly influenced the sustainability of donor-funded livelihood projects. Therefore, policies should be reviewed to provide an enabling environment and culture that supports access to support services such as affordable extension services, affordable and readily available credit, and markets. Future studies should use simple and direct Likert items with diverse projects.

Introduction

Projects are often utilized as a vehicle through which institutions achieve their goals (PMI, 2008). They are seen as the ideal instruments of change in the society (Silvius & Schipper, 2014; Marcelino-Sadaba et al, 2015). Due to the need to increase income base and diversify food sources and livelihood options, governments across the globe and organizations have been implementing livelihood projects (Wicander & Coad, 2015; Lu & Lora-wainwright, 2014).

Sustainability has attracted intense scholarly interest among academicians, researchers, development institutions and governments with between 5 and 10 articles published yearly in between 2009 and 2015 (Silvius & Schipper, 2014; Carvalho & Rabechini, 2017; Aarseth, 2017). There is an increasing pressure and growing sensitivity on organizations and donors and researchers to include sustainability issues in the projects (Marcelino-Sadaba et al, 2015). Chofreh, Goni, Shaharoun & Ismail (2015) define sustainability as endurance of processes and system. Bond et al (2014) simply referred to sustainability as long term programme continuation following implementation and or simply the maintained practice past the implementation phase. From Oina et al (2015) it can be deduced that sustainability refers to the degree to project persistence despite the withdrawal of donors. It is with these varieties of definition that ability to endure and regenerate benefits and continue implementation upon withdrawal of donor funding will be adapted in this current study.

Project exit strategy is a descriptive plan of how the project sets to withdraw its resources without endangering the achievement of the project goals while ensuring the progress towards these goals will continue (Gardner, Greenblott & Joubert 2005; and Roger &

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https://doi.org/10.20525/ijrbs.v9i4.771

Macias, 2004). It describes how target community will be discharged from a project (Simon & Ismail, 2008). It guarantees sustainability of project impacts after an intervention has ended or withdrawal of external support and to enable more progress towards the program or project's development goals. Failure to include exit strategy during planning may result into haphazard and uncoordinated execution of exit activities in the close proximity of the program's end.

As donors and project implementers gradually advance towards exiting projects, they want to leave behind a community that continually accesses critical services. They work towards linking these communities to these vital service providers. Effectiveness and sustainability of groups can be boosted by the creation of vertical and horizontal linkages with other groups (Rogers & Macias, 2004). Horizontal linkages involve establishment of networks with similar neighboring groups as they can be a starting place for mutual support and assistance while vertical linkages involve establishing networks with local groups, the government institutions or other organizations. These groups motivate and refresh skills and foster local community to commitment towards post-aid implementation.

The emphasis to these support service linkages is because this target group is mostly under-educated; less literate; lack technical and managerial skills; lack bargaining power and better access to capital; and have limited access to information (Fayet & Vermeulen, 2014). As such diverse supportive initiatives and interventions have emerged to enhance the sustainability like in India so as to enhance the cotton supply chain such as partnering with private sector and non-government organization to provide consultations services. Once the target group [farmers] has been trained, extension services simultaneously focus on enhancing their group management, financial, innovation and marketing skills of the existing structures. This improves their competitiveness within a market chain.

Donors try to foster projects that encourage market linkage methods. In some countries (such as Zambia), CARE, an international financing NGO, has been working and designing initiatives to bolster the capacity of input providers to supply technology to target (or local) farming communities, instead simply giving them the required inputs (Ferris et al, 2014). Another area that needs support is the access to credit by the target group [farmers]. As seen earlier most of the farmers lack adequate access to capital. These farmers need financial support that offers them low cost, secure, simple, transparent and flexible credit; insurance; and saving. In efforts to building the financial skills and provision of small loans, a number of NGOs are developing "savings and internal lending communities" (SILC's) or self-help, and Savings and credit cooperative societies (SACCOs). Other informal systems as discussed by Francis, Nassar & Mehta (2013) are; Rotating Savings and Credit Associations (ROSCAs), well understood as merry-go-rounds and Accumulating Savings and Credit Associations (ASCAs).

In the rural India [Telangana state] self-help movement saving and bank linkage programs model has been used to create self-reliance and empower low capital women through which they have demonstrated how to mobilize, manage and appraise credit (Lalitha & Kumar, 2016). SACCOs have also been used by low capital women and men in Tanzania to mobilize traditional strength in order to sustain their livelihoods (Maleko et al, 2013). In Kenya about 70% of adults turn to a number of informal lending systems [those that operate outside the regulation of the central monetary policy] to chase their entrepreneurial dreams and boost their livelihoods because of the nature of formal financial system [that is characterized by high cost of borrowing; high deposit requirements, high recurring fees; high maintenance costs] and limited credit capability (Francis, Nassar & Mehta 2013). The government of Kenya [with support from the intergovernmental organizations and non-governmental organizations] has also developed policies and programs aimed at improving credit accessibility for the country's entrepreneurs through various acts of parliament [such as the companies act, the cooperative societies act and the societies act] but have not succeeded in reaching the target groups.

The national and county governments in Kenya together with donor bodies such as Department for International Development (DFID), Canadian International Development Agency (CIDA), World Bank, United Nations Children's Fund (UNICEF), and United States Agency for International Development (USAID) among others have joined hands to improve the living standards of its citizens through implementation of various livelihood projects. This is so as they consider projects a means of achieving this (Silvius & Schipper, 2014; Marcelino-Sadaba et al, 2015).

One of the most worrying issues is that these governmental and donor funded projects have stalled or gone dormant immediately or shortly after the donors phase out or funding is withdrawn. Oino et al (2015) and Kimweli (2013) also argue that in Kenya a lot of money is spent in community-based projects up till now majority of such projects have in general not succeeded in bringing sustainable benefits and profits to the target groups. Wabwoba & Wakhungu (2013) in their study on sustainability these food security and livelihood projects (in Kiambu) it was revealed that these have little impacts when external funding ceases.

This is still similar with livelihood projects in Kilifi County. In support of this observation, Tang et al (2013) also noted that the trend with sustainability of projects is dissatisfying, as only a smaller number of projects are being sustained. Karanja (2014) similarly observed that the costs incurred during execution do not correspond with the benefits accrued in the counterpart county of Murang'a. Most donor funded livelihood projects are promising towards closure but the situation changes when funding is withdrawn and the donors are at a distance. These projects struggle to endure the waves that come after termination. This dismal sustainability continues to deprive the communities of the expected returns from the projects. This by extension is experienced with Gandini Food security and livelihood project, Dodosa High Impact Project and Uvumbuzi project.

Oino et al (2015) further elucidates that though many projects emphasize elements of sustainability at their proposal stage, the actual execution appears to be short of emphasis on sustainability.

In Kilifi County, less is known through research about the sustainability of these donor funded food security and livelihood projects. No rigorous study has been done in relation to how implementation of the exit strategy influences project sustainability of donor funded livelihood projects post-implementation in Kilifi County though some by Wren & Speranza (2010); Kisengese (2012); and Mwamuye, (2014) have studied livelihood projects. Harrison (2005) and Okoth (2012) studies single aspects of sustainability but not as exit strategies.

When a project closes and the external support is no longer provided, Ferris et al, (2014) observed that the benefits previously realized by project target groups are habitually lost, but project team can evade this by taking the upbeat and bubbly steps to build farmers' capacity, establishing links and connections with local, regional (or even national) supply chain actors, and harmonizing services with other players and developing charge-for-service field agent arrangements or networks. It is against this context that this study sought to investigate the relationship between support service linkage strategies of the project and sustainability of donor funded livelihood projects in Kilifi County.

The purpose of the study was to investigate the influence of support service linkage strategies on sustainability of donor funded livelihood projects in Kilifi County. The objective of this paper is to establish how support service linkage strategies influence sustainability of donor funded livelihood projects in Kilifi County.

This study was guide by the hypothesis below:

H_0: Support service linkage strategies do not significantly influence sustainability of donor funded livelihood projects in Kilifi County

H_1: Support service linkage strategies significantly influence sustainability of donor funded livelihood projects in Kilifi County

Following the literature review, this paper is organized by research and methodology, empirical findings, discussion and conclusions

Literature Review

Sustainability of projects

Project sustainability brings the distinction between successful and failed community-based projects (Oina et al, 2015) and because of this imperative interplay many institutions (70% of the respondents) in a study by Kiron et al (2012) were found to be tabling sustainability on the management agenda and consequently upping their commitments toward it and always asking what to do next to make sustainability become part of their system. Even though its integration in projects is gaining momentum, it is also vulnerable. Jenkins et al (2010) point out that some projects in low and middle earning countries face challenges with sustainability due to competition with other priorities.

There are numerous descriptions of project sustainability are as a result of increased scholarly interest and increased pressure by donors and organizations (Pohl et al, 2010; Silvius & Schipper, 2014; Aarseth, 2017 and Carvalho & Rabechini, 2017). As such there is no universal definition of term sustainability Mattiuzzi, 2017; 2017; Karanja (2014); Bond et al., (2014) and Spaling, Brouwer & Njoka (2014); Chofreh, et al., (2015). Perrini & Tencati (2006) combines the above definitions by referring to it as the capability of an organization or an institution to continue its activities indefinitely, while taking into consideration the economic, social, and environmental dimensions of a project. From the works of Bond et al (2014) and Spaling, Brouwer & Njoka (2014) sustainability is a long term programme continuation following implementation and or simply the process of maintaining the practice beyond the implementation phase while relating to projects or programs.

Chirenje, Giliba & Musamba (2013) studied the determinants of project sustainability in Indonesia; and Oina et al (2015) in community based project in Kenya respectively found and categorized them into technical (appropriateness of technology and technical skills); economic aspects (cost efficiency, cost recovery and operational requirements); social aspects (participatory decision making and resistance or acceptance); and organizational factors (administrative or management support and legal support).

While demystifying the dilemma facing sustainability Oina et al (2015) says that sustainability is exhibited when there is continued reaping of dividend, participation and ownership in the project. Projects are considered sustainable when the target community, without external support, is able to continue producing beneficial results provided that the problem subsists (Spaling, Brouwer & Njoka, 2014).

Support service linkage strategies and sustainability of donor funded livelihood projects

Support services are critical to the livelihood projects implemented in the poor rural setups. This is because as the preceding term suggests these services play a vital role in the development of crucial project sectors. These services are obtained by undertaking crucial initiatives involving the target population and the service holders. Davis (2004) mentions some examples of micro-credit and micro-enterprise development initiatives in Latin America which had clear impacts on rural service activities. He further says that since continued production is a sure indication of sustainable project there is need to improve linkages between the on-the-site enabling activities and support service provision such as input supply and markets.

Extension refers to the provision of updated information, advisory and other current services to help individuals or groups to best utilize available resources. Through the extension sessions the farmers get information (relating to cropping and pricing patterns, seeds and livestock varieties, crop management and marks) that enable them optimize limited local resource utilization.

Muyanga & Jayne (2006) conducted a study in 16 sub-counties in Kenya on practices and policy lessons on agricultural extension services and found that remote areas and poor farmers do not get better services; public funds to support delivery of these services are constrained. They recommended that since these services are provided by both private and public sector, the two major providers should look into devising a mix that would ensure alternative sustainable extension services that characterized by stakeholder participation, responsive to farmers' needs, cost effective, broad-based in-service delivery, and accountable. There are three main form of extension service provision: public, parastatals and private. The government has had some initiatives and programs to support the extension service provision to farmers (Muyanga & Jayne, 2006) such as the National Agriculture and Livestock Extension Programme (NALEP) by the government of Kenya in partnership with Swedish International Development Agency (SIDA).

Linkages to financial services are another aspect of support to the farmers. Farmers need financing especially after the donor has withdrawn. Those linked to markets can easily access credit from financial institutions, families and friends. Linking farmers to saving groups also helps in enhancing farmers' financial capability. Mottaleb, Mohanty & Nelson (2014) say that it is meaningful to understand the factors that affect farmers' decision to sell as a road to strengthen market linkages. Providing basic education (through trainings) and infrastructure (such as irrigation systems) strengthen market linkages.

One of the challenges that agriculture-oriented projects are day by day struggling with is climate change. Climate change threatens the welfare of millions of people's food security, health, nutrition and management of natural resources. The implementers of livelihoods projects are incorporating smart initiatives cognizant of climate change aspects in their trainings and operations as efforts to implement best agricultural practices. For these measures can enhance farmers' adaptation to climate change. Juana et al (2013) found out in their study that access to extension services and credit facilities were among the major factors in embracing of climate change adaptation measures among the sub-Saharan African farmers. Access to affordable credit boosts farmer's financial stamina and capacity to meet transaction costs associated with production.

Most of the livelihood projects that aim at improving the economic status of its target population bank on the idea that some of the yields will be consumed through markets. Markets are also referred to as networks or institutions or social arenas that allow firms, customers, suppliers and government to interact in exchange of goods and services (Dunne et al 2013). Specific to farmers this would imply a structure that would allow farmers to exchange their farm products and information. According to Ferris et al (2014) there are three major categories of market depending on the formality, structure and complexities. They include: informal, formal and structured public markets. By the virtue of the lower capacity of farmers in rural set ups where most livelihood and food security projects are implemented, the smallholder farmers prefer the informal markets as they offer great income opportunities. On the darker side of informal markets, they are at high risk of cartels.

The purpose of linking farmers to markets is to invest in approaches that enable farmers to gain access in to markets that correspond with their investment, production, capacities, and risk profiles; and to link the most susceptible farmers with the most vibrant markets. These linkages offer greater income security, more support services, and social services. Extension service provision plays a very critical role in establishing these linkages (Ferris et al (2014).

Theoretical framework

This study was anchored on the Lippitt's theory of planned change; Stakeholder Management theory and complex systems theory.

Lippitt's Theory of Change

Change involves diminishing the current state and establishing and being in the desired state (Stichler, 2011). Lippitt's theory of change is one among the many that were developed to do this. The theory was developed by Lippitt, Watson, and Westley (1958) in expansion of Kurt Lewin's unfreezing, movement and refreezing theory of change. It provides that for change to occur the change agent must undertake seven steps. The steps are: identification of the problem; assessment or weighing up of the capacity and motivation of the change agent; assessment of resources of the change agent; selection of progressive change objects (action plans and strategies); understanding of the role of the agent by the key partners; maintaining change; and gradual termination of the support relationship. This theory is relevant to this study in that before an organization sets to implement a project in a given community it is assumed that prior studies are carried out. Problem identification and definition (needs assessment) and capacities and motivation (feasibility studies) are carried out which then followed by choice of relevant initiatives what Geraci (1997), Lippert & Davis (2006) and Lippitt et al (1958) refer to as goal setting and progressive change objects, action plans and strategies. The plans (for change) are then implemented with the help of the change agent (the funding organization) in collaboration of other stakeholders.

Stakeholder management theory

This theory was developed by Freeman (1984). It is one of the widely used theories in sustainability management. The theory emphasizes the relationship between the organizations and stakeholders. In this theory Freeman (2010) defines stakeholders as those groups and individuals who have potential to affect or can possibly be affected by the actions of an organization [project] or any individual or group who can affect or is affected by the achievement of an organization goal. In fostering sustainability, possible

challenges that managers face would be affixing sustainability in the state of mind of all possibly identified stakeholders; and creating a mutual sustainability interests between different stakeholders (Hörisch, Freeman & Schaltegger, 2014) as different stakeholders have different and conflicting interests and powers (Stead & Stead, 1996).

Complex systems theory

This theory was founded by Von Bertalanffy in 1930 (Rolmans & Loobach, 2009). It explains how interrelated components (in science, technology, nature and scope) that affect each other in a system can be analyzed. In managing complex but adaptive system, a Complex theory can be used to explain the factors influencing the process of change to a complex adaptive system from one state to another. During formulation of objectives, the system should be flexible and adjustable at the system's level. The non-linear interactions exhibited in the complex systems theory are relevant and contribute to the explanation and prediction of how the non-linear interactions between the support services linkages contribute or influence sustainability of projects.

Research gap

Gaps and limitations realized in the above literature include: use of smaller sample sizes, use of single data collection method, failure to carry out a wholistic study capturing support service constructs that influence sustainability of projects. For instance, a study by Carvalho & Rabechini, (2017) was biased to non-probabilistic sample, Wabwoba & Wakhungu (2013) used of qualitative methods alone. Study by Bond et al. (2014) sampling only involved one respondent per site and relied on reports from respondents who had variable and limited knowledge of the project follow-up period. Sample size in Stevens & Mody (2013) sample was too small (20 out of 162) and the only qualitative methods. Bernnett et al (2015) investigated access to support services post implementation. Some potential strategies such as support service linkages influencing sustainability were missing in the study of Aarseth et al. (2017). A study by Minzner et al. (2014) focused only on capacity building as an exit strategy while forgetting the inclusion of the vital variables such as support service linkages that also are considered to greatly influence project sustainability. This study bridged these gaps by employing the Slovin's formula (Singh & Masuku, 2014) to inform sample size while using multiple data collection methods to study support service linkages during and post implementation.

Research and Methodology

Research design

This study employed descriptive correlational research design. This is a combination of descriptive research and correlational research approaches. Descriptive design was used in making careful in-depth observations of the phenomenon of interest. In accordance with Creswell (2012) the correlational research design involved the measurement of capacity building exit strategies and sustainability of donor funded livelihood projects and later determine the degree to which these variables are related. When descriptive design and correlational designs were used for the researcher to understand the features of the population and study the relationships or associations between or among variables.

Target Population

A population of 295 farmers was targeted for quantitative data collection. The population was distributed as 140 farmers of Gandini livelihood and food security project; 95 farmers of the Dodosa High Impact project; and 60 farmers targeted by Uvumbuzi Project. The ward agricultural extension officer, ward livestock officer attached to the projects; irrigation officer, cooperative officer, 3 assistant chiefs from the area in which the projects were implemented were targeted for qualitative data collection. Thus, the target population was 295 farmers drawn from the tree projects and 7 individuals from the technical and administration class totaling to 302 members.

Sample size and sampling procedure

The sampling frame for the study was the farmers in Gandini food security and livelihood project, Dodosa High Impact project and Uvumbuzi project. The sample size of was obtained using Solvin's formula (Elemeda, 2010).

$$Sample\ Size\ (n) = \frac{N}{(1+Ne^2)} \text{ and } = \frac{295}{(1+295*(0,05)^2} = 170 \text{ respondents}$$

This study employed both probabilistic (random) and non-probabilistic (non-random) designs of sampling. Random sampling was adopted to give every member of the population an equivalent chance of appearing (or being included) in the sample (Bordens & Abbott, 2011).

Further, based on the use of quantitative and qualitative methods to research, this study used a nested-concurrent sampling design in which a large sample participates in [either] quantitative [or qualitative] and the small sample participates in the opposite simultaneously in a single research phase. Proportionate cluster and simple sampling for individual interviews (quantitative data) while purposive sampling used to select key informants and members of the population that constituted the focus group discussion.

In Gandini 80 farmers were sampled while 55 were sampled in Dodosa project. In Uvumbuzi project 35 were sampled. In addition, one agricultural extension officer, one livestock officer, one irrigation officer, one cooperative officer and three local administrators from the respective project sites were included. This made the total to 177 respondents taking part in data collection.

Data collection procedure

Pre-constructed questionnaires with pre-determined response categories were used to avoid free expression of thoughts and feelings of the subject. The questionnaire responses in sections B, C, D, E, and F were based on 5-point Likert scale. Semi-standardized one-on-one interviews were used to gather data from the 7 key informants. Three focus group discussions were carried out as one men FGD in Gandini, one women FGD in Dodosa and one project committee FGD.

Cronbach Coefficient was used to measure reliability. Kinyanjui (2014) points out that Cronbach Coefficient is applied to test internal consistencies of samples of a particular population.

Ethical considerations

The introductory letter was obtained from the University of Nairobi, School of open and distance learning introducing the study to the relevant authorities. The letter facilitated the acquisition of the permit for research from National Commission for Science Technology and Innovation (NACOSTI). The researcher also sought approvals from Kenya Red Cross Society, County commissioner's office and the County Director of Education in Kilifi County. The Magarini sub-county and local leadership Gandini, Baricho and Singwaya sub-locations was also reached out for permission.

Five research assistants were trained in data collection with emphasis on the use of kobo collect application and research ethics. Seventeen questionnaires were pretested in Paziani in Paziani sub-location, Malindi division, and Malindi sub-county in Kilifi County. There had been a similar project supported by World Food Program that had been closed in 2018. The data collected was further checked for completeness before being subjected to data analysis.

Data analysis

Quantitative data was analysed using descriptive and inferential data analysis techniques. Descriptive analysis was undertaken using central tendency (mode, means and median), frequency distribution and percentages) and measures of dispersion (variance and standard deviation) to understand the characteristics of the respondents. The inferential analysis was carried out using correlation and regression model to test the hypothesis and test for associations among variables of interest under this study. ANOVA was used to test model fitness.

Measures of central tendency, dispersion and variability were used to examine the strength and weakness of central tendency and how values are spread around the central tendency (statistical dispersion) using mode, mean, and standard deviation. The level of confidence was set at ninety five percent (95%) while the level of significance alpha will be set at 0.05. Inferential and descriptive statistics were generated using Statistical package for social sciences version 25 (SPSS 25).

Empirical Findings

Response rate

Questionnaires were administered to a sample of 170 farmers. 163 were returned complete. This represented 95.88% questionnaire response rate. In-depth interviews were conducted with 7 key informants that had been targeted.

Demography

48.5% (79) of the respondents came from Gandini Food security project while 30.7% (50) respondents came from Dodosa project. The least, 20.9% (34) of the respondents came from the Uvumbuzi project with only 19.6% (32) of the respondents being male while 80.4% (131) of the respondents being female.

The study findings indicate that 4.9% (8) respondents fell in the bracket of 18-25 years; 18.4% (30) respondents in 26-35 years while 26.4% (43) respondents were in the 36-45-year bracket. 22.1% (36) respondents were in the 46-55-year bracket while 28.2% (46) respondents were above 55 years. This reveals that 71.8% were 55 years and below (but not less than 18 years) and hence reproductive meaning that the larger percentage of the respondents fall in the reproductive age.

The findings reveal that only 3.7% (6) respondents were single with 73% (119) respondents being married. 23.3% (38) respondents were single parents. This shows that majority (96.3%) of the respondents apart from the role in the project they have a role of parenthood. 46% (75) of the respondents did not attend school at all. 20.2% (33) attained the lower primary school education while 27.6% (45) of the respondents attained the upper primary school education. 6.1% (10) respondents attained the secondary school education. None of the respondents attained tertiary or college education.

No respondent had stayed on the project for one year or less. 12.9% (21) respondents had stayed in the project for 2 years. 17.2% (28) respondents had stayed in their respective project for 3 years. Only 6.7% (11) had stayed for 4 years while 63.2 % (103) respondents had stayed for 5 years and above.

Access to extension services and sustainability of donor funded livelihood projects in Kilifi County

The researcher pursued to establish the extent to which the respondents perceived the access to extension services influenced sustainability of donor funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5.

The findings were as indicated in the table 1 below.

Table 1: Access to extension services and Sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SS1	11	65	22	42	23	163	3.01	0.096	1.225
	(6.7%)	(39.9%)	(13.5%)	(25.8%)	(14.1%)	100			
SS2	5	44	7	74	33	163	3.53	0.092	1.178
	(2.5%)	(27.0%)	(4.3%)	(45.4%)	(20.2%)	100			
SS3	2	32	15	88	26	163	3.64	0.079	1.011
	(1.2%)	(19.6%)	(9.2%)	(54%)	(16.0%)	100			
Composite							**3.393**		

SS1: There is a formal agreement with extension service providers
SS2: You often receive advisory on crop husbandry
SS3: Your access to extension services is affordable

The findings in Table 1, on Item 1 (SS1), indicate that 11 (6.7%) of the respondents strongly disagreed; 65 (39.9%) disagreed; 22 (13.5%) were neutral; 42 (25.8%) agreed while 23 (14.1%) strongly agreed that there was a formal agreement with extension providers. The mean was 3.01, standard deviation was 1.225 and the standard error of mean was 0.096. The mean perception of the sample lied between 1.785 and 4.235. This points that the respondents had mixed opinion on the availability of the formal agreement. 5 (2.5%) respondents strongly disagreed; 44 (27%) disagreed; 7 (4.3%) were neutral; 74 (45.4%) agreed while 33 (20.2%) strongly agreed that they often received the advisories. The mean was 3.53 with a standard deviation of 1.178 and mean standard error of 0.092. The mean perception of the frequency of advisories lied between 2.352 and 4.708 indicating mixed views on the frequency of reception of advisories. With the composite mean perception for extension services of 3.393 the respondents were neutral of the perception on access to the extension services.

Access to credit services and sustainability of donor funded livelihood projects in Kilifi County

The researcher pursued to establish the extent to which the respondents perceived the access to credit services and its influence on sustainability of donor funded livelihood projects as shown in the table 2.

Table 2: Access to credit services and sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SS4	49	78	9	23	4	163	2.11	0.083	1.066
	(30.1%)	(47.9%)	(5.5%)	(14.1%)	(2.5%)	100			
SS5	29	75	13	32	14	163	2.55	0.097	1.233
	(17.8%)	(46%)	(8.0%)	(19.6%)	(8.6%)	100			
SS6	13	26	60	51	13	163	3.15	0.083	1.046
	(8.0%)	(19.6%)	(36.8%)	(31.3%)	(8.0%)	100			
Composite							**2.603**		

SS4: There are adequate credit facilities from which you can get loan around you
SS5: You frequently acquire loan to support your project activities
SS6: The interest rate for credit is affordable

In the table 2, Item 4 (SS4) sought to establish the extent to which the respondents perceived to have adequate credit facilities from which they could acquire loans. The results show that 49 (30.1%) of the respondents strongly disagreed; 78 (47.9%) disagreed; 9 (5.5%) were neutral; 23 (14.1%) agreed and 4 (2.5%) strongly agreed to have adequate credit facilities from which they could acquire

loans. The majority (78%) disagreed. The mean for this item was 2.11 (perception between 1.044 and 3.176) showing that the sample disagreed. Item 5 (SS5) found out that 29 (17.8%) strongly disagreed; 75 (46%) disagreed; 13 (8.0%) were neutral; 32 (19.6%) agreed while 14 (8.6%) strongly agreed that they had frequently acquired loans to supported project activities. With mean of 2.55, standard deviation of 1.233 with a mean perception between 1.327 and 3.773 it showed that the respondents had mixed.

Item 6 (SS6) found out that 13 (8.0%) strongly disagreed; 26 (19.6%) disagreed; 60 (36.8%) were neutral; 51 (31.3%) agreed; and 13 (8.0%) strongly agreed. With a mean of 3.15; standard deviation of 1.046 and a standard error of mean of 0.083, and perception mean range of 2.104 and 4.196 it was concluded that the sample had mixed reactions on the affordability of loan interest rate.

Market linkage services and sustainability of donor funded livelihood projects in Kilifi County

This construct Likert items pursued to establish the extent to which the respondents perceived the market linkages and its contribution to sustainability of donor funded livelihood projects as shown in the table 3 below.

Table 3: Access to credit services and sustainability of donor funded livelihood projects

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SS7	5	53	6	70	30	163	3.42	0.093	1.191
	(2.5%)	(32.5%)	(3.7%)	(42.9%)	(18.4%)	100			
SS8	6	66	11	53	27	163	3.18	0.096	1.232
	(3.7%)	(40.5%)	(6.7%)	(32.5%)	(16.6%)	100			
SS9	2	34	18	80	29	163	3.61	0.082	1.044
	(1.2%)	(20.9%)	(11.0%)	(49.1%)	(17.8%)	100			
Composite							**3.403**		

SS7: You have sufficient production for the market
SS8: You have adequate market for the produce
SS9: The market prices are favourable

In the table 3, item 7 (SS7) indicated that 5 (2.5%) strongly disagreed; 53 (32.5%) disagreed; 6 (3.7%) were neutral; 70 (42.9%) agreed; and 30 (18.4%) strongly agreed to have had sufficient production for the market. The item had a mean score of 3.42; a standard deviation of 1.191 and a standard error of means of 0.093, and mean perception between 2.229 and 4.611 implying a neutral stand on sufficiency of production for the market.

Item 8 (SS8) found out that 6 (3.7%) of respondents strongly disagreed; 66 (40.5%) disagrees; 11 (6.7%) were neutral; 53 (32.5%) agreed; 27 (16.6%) strongly disagreed to have had adequate market for the produce. With a mean score of 3.18; standard deviation of 1.232; and a standard error of mean of 0.096, and mean perception between 1.948 and 4.412 implied mixed views about the market for produce.

Item 9 (SS9) established that only 2 (1.2%) strongly disagreed; 34 (20.9%) disagreed; 18 (11%) were neutral; 80 (49.1%) agreed; and 29 (17.8%) strongly agreed that the produce market prices were favourable. The mean score of 3.61; a standard deviation of 1.044; and standard error of mean of 0.0822 and mean perception between 2.566 and 4.654 implied mixed views on favourability market prices.

Table 4: Composite statistics for support service linkages and sustainability of donor funded livelihood project

Sub-indicator	**N**	**Mean**	**Std. Error**	**Std. Deviation**	**Cronbach's coefficient**
Access to Extension services providers	163	3.39	.069	.885	0.659
Access to Credit services	163	2.61	.060	.769	
Market linkages	163	3.40	.073	.938	
Composite statistics	**163**	**3.1336**	**.04574**	**.58393**	

In the Table 4 above access to extension services had a composite mean of 3.39, standard deviation of 0.885 and standard error mean of 0.069. The mean perception of 2.505 and 4.275 indicating mixed views on the access to extension services tending towards agreement though the composite mean shows neutral stand. Access to credit services had a mean of 2.61 and standard deviation of 0.769 and standard error of mean of 0.060 with a mean perception lying between 1.841 and 3.379. Though the composite mean indicates disagreement (negative) stand, the sample had mixed views tending toward disagreement. Market linkages scored a composite mean of 3.40 with a standard deviation of 0.938 indicating neutral stand. The composite mean range of 2.462 and 4.338

show mixed views on the market linkages. However, the overall composite mean for the support service linkages is 3.1336 and standard deviation of 0.5839 indicating mixed reaction tending toward agreement.

The Cronbach's Reliability coefficient for the nine Likert items was 0.659 indicating that the items had an acceptable internal consistency for training construct. Therefore, the conclusions made for this construct (support service linkages) are valid. The composite means for extension service indicated that the sample perception of the respondents 3.39 fall in the neutral area indicating mixed views.

Hypothesis testing

The following hypothesis guided the study.

H_0: Support service linkages do not significantly influence sustainability of donor funded livelihood projects in Kilifi County

H_1: Support service linkages significantly influence sustainability of donor funded livelihood projects in Kilifi County

Correlation between support service linkages and sustainability of DFLPs

Findings for association between support service linkages and sustainability of donor funded livelihood projects were indicated in the table 5 below.

Table 5: Correlation between support service linkages and sustainability of DFLPs

Variable/indicator	Test	Sustainability of donor funded livelihood projects	Support service linkages
Sustainability of donor funded livelihood projects	Pearson Correlation	1	.386**
	Sig. (2-tailed)		.000
	N	163	163
Support service linkages	Pearson Correlation	.386**	1
	Sig. (2-tailed)	.000	
	N	163	163

***. Correlation is significant at the 0.01 level (2-tailed).*

The table 5 shows Pearson product moment correlation (r) =0.386; p=0.00011<0.01. In reference to 0.8-.09 very strong positive; 0.6-0.7 strong positive; 0.5 moderate positive; 0.3-0.4 weak positive; and 0.1-0.2 very weak positive, there is a weak positive correlation between support service linkages and sustainability of DFLPs. Null hypothesis "*There is no significant relationship between support service linkages and sustainability of donor funded livelihood projects in Kilifi County*" was rejected to imply that there was significant relationship between support service linkages and sustainability of donor funded livelihood projects in Kilifi County.

Regression analysis for support service linkages and sustainability of DFLPs in Kilifi County

The outputs of the regression analysis were used to determine the summary model, fitness of the model and the mathematical model for the variables under study.

Table 6: Regression Model summary for support service linkage and sustainability of DFLPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.383[a]	0.147	0.141	0.515

a. Predictors: (Constant), Support service linkages

The model in table 6 shows that support service linkage predicts 14.7% of sustainability of DFLPs however when adjusted it predicts 14.1% of sustainability of DFLPs. 85.3% of sustainability is predicted by other factors. The fitness of the model was tested by ANOVA. The null hypothesis, "*The model for support service linkages predicting sustainability of DFLPs is not fit"*. The results of the test are indicated in the table 7 below:

Table 7: Test for model fitness for predicting support service linkage and sustainability of DFLPs

Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Regression	7.341	1	7.341	27.684	0.00027b
Residual	42.690	161	0.265		
Total	**50.031**	**162**			

a. Dependent Variable: Sustainability of donor funded livelihood projects

b. Predictors: (Constant), Support service linkages

The model fitness p-value test in table 7 shows $F_{(1,161)} = 27.684$; P=0.000027<0.05. The null hypothesis was rejected and concluded that the model for support service linkages predicting sustainability of DFLPs is fit and that support service linkage predicts 14.7% of sustainability of DFLPs. This hints out that support service linkages could alone be used to predict sustainability of DFLPs.

The extent to which support service linkages influence sustainability of DFLPs were guided by the mathematical model below.

$Y = ß_0 + ß_2X_2 + Ɛ$; *where* $Ɛ$ *is the random error*

Table 8: Mathematical model for support service linkages and sustainability of DFLPs

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	2.504	0.221		11.339	0.000
Support service linkages	0.365	0.069	0.383	5.262	0.00027

a. Dependent Variable: Sustainability of donor funded livelihood projects

From the table 8, a mathematical model was generated as shown below.

$Y = 2.504 + 0.365X_2 + Ɛ$ where; Ɛ is error and X_2 is the Support service linkages

The model shows that an increase in support service linkages by one (1) unit increases the sustainability by 0.365 units and reduction by one (1) unit reduces sustainability by 0.365 units. Given the p=0.00027<0.05 the null hypothesis, "*Support service linkages do not significantly influence sustainability of donor funded livelihood projects in Kilifi County*" therefore rejected. It was concluded that Support service linkages significantly influence sustainability of donor funded livelihood projects in Kilifi County.

Table 9: Access to extension credit services, market linkages and sustainability of DFLPs

	Unstandardized Coefficients		**Standardized Coefficients**		
Model	B	Std. Error	Beta	**t**	**Sig.**
(Constant)	2.558	.226		11.341	.000
Access to Extension services	.170	.051	.271	3.310	.001
Access to Credit services	.045	.053	.062	.853	.395
Market linkages	.116	.049	.196	2.388	.018

a. Dependent Variable: Sustainability of donor funded livelihood projects

The above coefficients indicate the independent contribution of access to extension services, access to credit services and market linkages. The table indicates that access to extension and market linkages had significant influence whereas credit facilities did not have a significant influence on the sustainability of DFLPs in Kilifi County.

The expanded model considering the three looked as follows;

$Y = 2.558 + 0.17E + 0.045C + 0.166ML + Ɛ$

This indicates that an increase by one unit of access to extension services contribute an increment of 0.17 units of sustainability; an increase by one unit of access to credit services would contribute to 0.045 units of sustainability. An increase by one unit of market linkages would contribute to an increase in sustainability by 0.166 unit.

Discussion

This study established that respondents had mixed reactions on the contribution of support service linkages as informed by the composite mean perception of 3.1336 which falls in the neutral area. The discrete constructs of access to extension services ($\bar{x}$=3.39), access to credit $\bar{x}$=2.61) and market linkages ($\bar{x}$=3.40) also scored means in the neutral area. Inferential analysis revealed that support service linkages weakly but positively correlated (Pearson moment correlation, r=0.386) with sustainability of DFLPs. The support service linkages collectively influenced sustainability of DFLPs (p=0.00027<0.05). However, delving deeper, it was revealed that access to extension services (p=0.001<0.05) and market linkages (p=0.018<0.05) had significant influence. Davis (2004) also found out that improving linkages to markets and provision of support services influenced sustainability of projects in Latin America. Access to extension services was vital to ensure that new technologies or operational systems are efficiently and effectively utilized and to ensure that skills acquired through capacity building initiatives are transferred practically and optimally. The ward agricultural extension officer (in Kilifi County) indicated that the department as a mandate had programs to support extension service. This finding corresponded with Muyanga & Jayne (2006) that the districts studied had initiatives and programs to support the extension service provision to farmers.

Asked on whether or not there was formal agreement with service providers the larger proportion disagreed though recognized that respective projects had supported the provision of extension services from the extension officers from the county government departments of agriculture and livestock though they could not ascertain the details of agreement between the departments and the projects as they knew that such an agreement had been between the project implementers and the government. One key informant said,

"The officers from agriculture department have been coming with the Red Cross staffs to advise us on farming."

There was no provision of such services from private service providers. From the in-depth discussion, it was established that Gandini project has a formal agreement between the department of agriculture and livestock for extension services twice a month (which had not been entirely honoured). On whether the respondents often received the advisories in the FGDs they indicated that the frequency reduced after the project closed. The departments explained that limited resources were the main limiting factor. On affordability of extension services, it was established that some could feel the cost as it had been catered for by the project implementer hence a higher proportion (70%) thought it was affordable. The reason for the disagreeing proportion was that in times of urgency they had to sometimes take care of the logistics of the officers for them to visit farms. Other costs included communication in case the advisory would be delivered over the phone. One respondent in the FGD said,

"Looking for agricultural officers for more agricultural information became a challenge. The community had to contribute money for their transport"

Muyanga & Jayne (2006) conducted a study in 16 districts (what is now known as sub-counties) in Kenya on practices and policy lessons on agricultural extension services and found that remote areas and poor farmers do not get better services; public funds to support delivery of these services are constrained. Juana et al (2013) also found out in their study that access to extension services and credit facilities were among the major factors of sustainability in sub-Saharan African farmers.

Access to credit (p=0.395>0.05) did not have a significant influence. These findings however to some extent disagreed with Davis (2004) findings in which micro-credit and micro-enterprise development initiatives had clear impacts on sustainability of rural projects. The quantitative descriptive results on access to credit services scored a composite mean of 2.61 indicating that respondents were neutral (mean perception lying between 1.841 and 3.379) with mixed views. The majority (78%) of the respondents disagreed to the perception that there were adequate credit facilities from which they could acquire loans in their locality. The mean score for this item 4 (SS4) was 2.11 implying disagreement. It was established that the formal financial institutions (commercial banks-KCB, SBM, CBK, Equity bank) from where the respondents acquired loan were categorized into banking agents, mobile banking and loaning (M-shwari and Tala) non-formal means of acquiring loans including the village savings and loaning associations. From the FGDs and interviews it was established that the respondents preferred non-formal institutions to formal because of the distances and the long process for applying loans. All the commercial banks were located in Malindi town. The interest rate in the formal institutions and mobile loaning were relatively higher than the non-formal institutions. The average interest rate in commercial bank According to World Trend Plus's Global Economic Monitor (2019) Kenya's Bank Lending Rate was reported at an average of 12.380 % per annum in November 2019 compared to the informal institutions at most 10%.

Much of the loans acquired were used to support education by paying school fees (42%), opening up new or expanding businesses (21%) and buying household food (19%). It was unexpected that only 10% of the respondents who acquired loan used them to support project activities. This was explained by one respondent that the other bills were seen as individual responsibility but for the project it was thought to be a corporate responsibility.

As categorized by Ferris et al (2014) in Kilifi informal marketing was practiced. The markets were less regulated and prices were determined by the farmers themselves. These markets faced a myriad of challenges including location and distances, access to infrastructure such as roads, agricultural services, access to production technologies, marketing skills, organization of marketing communities. The discussions and in-depth interviews revealed that the departments of agriculture and cooperatives had played a role in linking farmers to markets through training, provision of market information. The farmers however opined that the departments had not played a notable role in finding markets for the farm produce. The cooperative model had been tried in Gandini project in which farmers had been organized to form cooperatives that had not realized mass production, collective marketing, saving and loaning however.

Conclusions

Null hypothesis H_0, $r=0.383$, $p=0.000027<0.05$ was rejected and concluded that support service linkage strategies significantly influenced sustainability of DFLPs.

In as much as the correlation of support service linkage strategies and sustainability was positive it was weak. Further examinations were done in terms of the access to extension services, access to credit services and market linkages as the constructs of support service linkages. Access to extension services ($p=0.001$), market linkages ($p=0.018$) against had significant contribution to sustainability of DFLPs in Kilifi County. Access to credit services ($p=0.395$) did not have a significant influence on sustainability of DFLPs in Kilifi County. It was concluded that access to extension services and market linkages were critical in the sustainability of these projects however limited access to credit services reduced the overall contribution of support service linkages ($r=0.147$; 14.7% prediction). This points out that relative equal focus on credit service would have increased the contribution of support service linkages to sustainability of these DFLPs in Kilifi County.

Project support service linkages are very critical in cementing the transfer and applicability of acquired knowledge and skills while growing the economic base of the targeted community. Feasibility studies are should be undertaken before introducing the new aspect of cooperative societies that never succeeded yet more resources were used in establishing the concept which was overtaken lately by the group saving associations that had started performing well before the project closed. The county government should also put policies in place to provide conducive environment for engagement of private partners; and use trainer of trainers (ToTs) approach to relieve the understaffing burden.

The study was delimited to the three donor funded livelihood projects in Magarini sub-county. To be able to generalize these results across projects further studies can be carried out in other parts under diverse project environment. The studies can further increase the sample sizes. It was found that sustainability did not depend on capacity building only but there were other factors that influence sustainability. Further studies can investigate such factors as community ownership.

This study was limited by time and cost. Donor funded livelihood projects (DFLPs) are implemented in different contexts as such a wide scope of contextual factors that would require the researcher to study a number of them so as to generalize the findings. Assured participation and by the target population is another anticipated limitation. This area is used to developmental project-oriented surveys in which in return there are almost immediate tangible benefits in terms of initiatives or interventions.

The study was delimited to Gandini food security and livelihood project, Dodosa High Impact Project and Uvumbuzi Project in Garashi ward in Magarini in Kilifi County because of the context and nature of the projects being studied. The study focused on donor funded projects working towards strengthening the economic base and bio-diversity of the target population. The other delimitation was on the establishment of the influence of support service linkage strategy on sustainability of donor funded alternative livelihood projects as moderated by stakeholder management in Kenya.

References

Aarseth, W., Ahola, T., Aaltonen, K., Økland, A., & Andersen, B. (2017). Project sustainability strategies: A systematic literature review. *International Journal of Project Management*, *35*(6), 1071-1083. http://dx.doi.org/10.1016/j.ijproman.2016.11.006

Bennett, S., Ozawa, S., Rodriguez, D., Paul, A., Singh, K., & Singh, S. (2015). Monitoring and evaluating transition and sustainability of donor-funded programs: Reflections on the Avahan experience. *Evaluation and program planning*, *52*, 148-158. https://doi.org/10.1016/j.evalprogplan.2015.05.003

Bond, G. R., Drake, R. E., McHugo, G. J., Peterson, A. E., Jones, A. M., & Williams, J. (2014). Long-term sustainability of evidence-based practices in community mental health agencies. *Administration and Policy in Mental Health and Mental Health Services Research*, *41*(2), 228-236. https://doi.org/10.1007/s10488-012-0461-5

Bordens, K. S., & Abbott, B. B. (2011). *Research Design and Methods: A Process Approach* (8th ed.). Mountain View, CA: Mayfield

Carvalho, M. M., & Rabechini, R. (2017). Can project sustainability management impact project success? An empirical study applying a contingent approach. *International Journal of Project Management*, *35*(6), 1120-1132. https://doi.org/10.1016/j.ijproman.2017.02.018

Chofreh, A. G., Goni, F., Shaharoun, A. M., & Ismail, S. (2015). A review on sustainability transformation roadmaps using project management methodology. *Advanced Science Letters*, *21*(2), 133-136. https://doi.org/10.1166/asl.2015.5841

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education, Inc. https://doi.org/10.1002/j.1556-6676.2013.00085.x

Davis, J. R. (2003). The rural-non-farm economy, livelihoods and their diversification: Issues and options. http://dx.doi.org/10.2139/ssrn.691821

Dunne, T., Klimek, S. D., Roberts, M. J., & Xu, D. Y. (2013). Entry, exit, and the determinants of market structure. *The RAND Journal of Economics*, *44*(3), 462-487. https://doi.org/10.1016/S0308-521X(01)00020-8

Fayet, L., & Vermeulen, W. J. (2014). Supporting smallholders to access sustainable supply chains: lessons from the Indian cotton supply chain. *Sustainable Development*, *22*(5), 289-310. https://doi.org/10.1002/sd.1540

Ferris, S., Robbins, P., Best, R., Seville, D.,Buxton, A., Shriver, J., & Wei, E. (2014). Linking smallholder farmers to markets and the implications for extension and advisory services. *MEAS Brief*, *4*(10), 13-14. www.meas-extension.org

Francis, A., Nassar, A., & Mehta, K. (2013). Are we formal yet? The evolving role of informal lending mechanisms to support entrepreneurship and poverty alleviation in central Kenya. *International Journal of Social Entrepreneurship and Innovation*, *2*(2), 109-129. https://doi.org/10.1504/IJSEI.2013.054152

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. (2010). *Stakeholder theory: The state of the art*. New York, NY: Cambridge University Press. www.books.google.com

Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*, 1st ed; Pitman Publishing: Boston, MA, USA, 1984; pp. 24–25.

Gardner, A., Greenblott, K., & Joubert, E. (2005). What we know about exit strategies: practical guidance for developing exit strategies in the field. *Lusaka, Zambia*.

Geraci, E. P. (1997). Computers in Home Care: Application of change theory. *Computers Nursing, 15* (4), 199-203. Retrieved from http://ovidsp.tx.ovid.com.qe2a-proxy.mun.ca

Harrison, P. (2005). A socio-economic assessment of sustainable livelihood opportunities for communities of Kuruwitu and Vipingo, Kilifi District, Kenya.

Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework. *Organization & Environment*, *27*(4), 328-346. https://doi.org/10.1177/1086026614535786

Jenkins, R., Kiima, D., Okonji, M., Njenga, F., Kingora, J., & Lock, S. (2010). Integration of mental health into primary care and community health working in Kenya: context, rationale, coverage and sustainability. *Mental Health in Family Medicine*, *7*(1), 37. https://doi.org/10.1002/j.2051-5545.2010.tb00289.x

Juana, J.S., Kahaka, Z. & Okurut, F.N. (2013). Farmers' Perceptions and Adaptations to Climate Change in Sub-Sahara Africa: A Synthesis of Empirical Studies and Implications for Public Policy in African Agriculture. *Journal of Agricultural Science, 5(4),* 121-135. http://dx.doi.org/10.5539/jas.v5n4p121

Karanja G.M. (2014). Influence of management practices on sustainability of youth income generating projects in Kangema District, Murang'a County, Kenya. *International Journal of Education and Research 2 (2) 1-12*

Kimweli, J. M. (2013). The Role of Monitoring and Evaluation Practices to the Success of Donor Funded Food Security Intervention Projects A Case Study of Kibwezi District. *International Journal of Academic Research in Business and Social Sciences*, *3*(6), 9. http://hrmars.com/index.php?/journals

Kinyanjui J.N., (2014). *Influence of contextual and cognitive factors on the relationship between performance contracting system and organizational peroformance in government ministries in Kenya*. Unpublished PHD Thesis. University of Nairobi.

Kiron, D., Kruschwitz, N., Haanaes, K., & von Streng Velken, I. (2012). Sustainability nears a tipping point. *MIT Sloan Management Review*, *53*(2), 69-74.

Kisengese, R. N. (2012). *Factors influencing implementation of agricultural projects in Kilifi county, Kenya* (Doctoral dissertation, University of Nairobi, Kenya).

Lalitha, D., & Kumar, D. T. V. (2016) Women Empowerment Through Self-Help Groups (Shg's): A Study of Siripuram Village in Telangana State. *Social Sciences International Research Journal ISSN*, 2395-0544.

Lippert, S. K., & Davis, M. (2006). A conceptual model integrating trust into planned change activities to enhance technology adoption behavior. *Journal of information science*, *32*(5), 434-448. https://doi.org/10.1177/0165551506066042

Lippitt, R., Watson, J., & Westley, B. (1958). The dynamics of planned change. New York, NY: Harcourt, Brace & World.

Lu, J., & Lora-Wainwright, A. (2014). Historicizing sustainable livelihoods: a pathways approach to lead mining in rural central China. *World Development*, *62*, 189-200. https://doi.org/10.1016/j.worlddev.2014.05.006

Maleko, G. N., Liheta, B. S., Aikaruwa, D., Lukas, A., & Sumari, G. A. (2013). Women Participation in Microfinance Institutions of Tanzania: The Case of Savings and Credit Co-operative Societies (SACCOS). *Journal of Business Administration and Education*, *4*(2).

Marcelino-Sádaba, S., González-Jaen, L. F., & Pérez-Ezcurdia, A. (2015). Using project management as a way to sustainability. From a comprehensive review to a framework definition. *Journal of cleaner production*, *99*, 1-16. https://doi.org/10.1016/j.jclepro.2015.03.020

Mattiuzzi E. (2017). Impacts of the Sustainable Communities Initiative on Regional Collaboration, Equity, and Planning Results of a Survey of Grantee Regions *Journal of Policy Development and Research*,19 (3)39-62. https://www.jstor.org/stable/26328352

Minzner, A., Klerman, J. A., Markovitz, C. E., & Fink, B. (2014). The impact of capacity-building programs on nonprofits: A random assignment evaluation. *Nonprofit and Voluntary Sector Quarterly*, *43*(3), 547-569. https://doi.org/10.1177/0899764013491013

Mottaleb, K. A., Mohanty, S., & Nelson, A. (2014). Strengthening market linkages of farm households in developing countries. *Applied Economic Perspectives and Policy*, *37*(2), 226-242. https://doi.org/10.1093/aepp/ppu026

Muyanga, M., & Jayne, T. S. (2006). Agricultural extension in Kenya: Practice and policy lessons. *Tegemeo Institute of Agricultural Policy and Development, Egerton University. Tegemeo Working Paper*, *26*, 2006.

Mwamuye, M. K. (2014). Poverty definition‟ and its contribution to projects failure in Kilifi County, Kenya. *Global Journal of Politics and Law Research*, *2*(2), 27-38.

Oino, P. G., Towett, G., Kirui, K. K., & Luvega, C. (2015). The dilemma in sustainability of community-based projects in Kenya. *Global journal of advanced research*, *2*.

Okoth, J. A. (2012). Factors influencing sustainability of community-based projects: the case of Arid Lands Resource Management Project II in Ganze constituency. *Kilifi County, Kenya*

Perrini, F., & Tencati, A. (2006). Sustainability and stakeholder management: the need for new corporate performance evaluation and reporting systems. *Business Strategy and the Environment*, *15*(5), 296-308. https://doi.org/10.1002/bse.538

PMI Standards Committee, (2004). *A Guide to the Project Management Body of Knowledge*, 3rd ed; Project Management Institute (PMI): Pennsylvania, PA, USA; pp. 81–86.

Pohl, C., Rist, S., Zimmermann, A., Fry, P., Gurung, G. S., Schneider, F., & Hadorn, G. H. (2010). Researchers' roles in knowledge co-production: experience from sustainability research in Kenya, Switzerland, Bolivia and Nepal. *Science and Public Policy*, *37*(4), 267-281. https://doi.org/10.3152/030234210X496628

Rogers, B., & Macias, K. (2004). Program graduation and exit strategies: a focus on title II food aid development programs. *Washington, DC: FANTA Project, AED*.

Silvius, A. G., & Schipper, R. P. (2014). Sustainability in project management competencies: analyzing the competence gap of project managers. *Journal of Human Resource and Sustainability Studies*, *2*(02), 40. https://doi.org/10.4236/jhrss.2014.22005

Simon, L. D., & Ismail, H. (2008). Southern African AIDS Trust: An evaluation of the process and outcomes of community-based partner graduation. *Canadian journal of public health*, *99*(1), 535-541. https://doi.org/10.1007/BF03403795

Singh, A.S.; Masuku, M.B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. *International Journal of Economics, Commerce and Management*, 2, 1–22.

Spaling, H., Brouwer, G., & Njoka, J. (2014). Factors affecting the sustainability of a community water supply project in Kenya. *Development in Practice*, *24*(7), 797-811. https://doi.org/10.1080/09614524.2014.944485

Stead, J.G., Stead, E. (2000). Eco-Enterprise Strategy: Standing for Sustainability. Journal of Business Ethics 24, 313–329. https://doi.org/10.1023/A:1006188725928

Stead, W. E., & Stead, J. G. (1996). *Management for a small planet*. Thousand Oaks, CA: Sage. https://books.google.co.ke/

Stevens, M. R., & Mody, A. Z. (2013). Sustainability Plans in British Columbia: Instruments of Change or Token Gestures?. *Canadian Journal of Urban Research*, *22*(1), 46-71. https://www.jstor.org/stable/26193937

Stichler, J. F. (2011). Leading change: One of a leader's most important roles. *Nursing for women's health*, *15*(2), 166-170. https://doi.org/10.1111/j.1751-486X.2011.01625.x

Tang, Q., Bennett, S. J., Xu, Y., & Li, Y. (2013). Agricultural practices and sustainable livelihoods: Rural transformation within the Loess Plateau, China. *Applied Geography*, *41*, 15-23. https://doi.org/10.1016/j.apgeog.2013.03.007

The World Bank (2019). Global economic monitor. https// https://datacatalog.worldbank.org/dataset/global-economic-monitor

Wabwoba, M. S. N., & Wakhungu, J. W. (2013). Factors affecting sustainability of community food security projects in Kiambu County. *Kenya: FAO Report*. https://doi.org/10.1186/2048-7010-2-9

Wicander, S., & Coad, L. (2015). *Learning our lessons: a review of alternative livelihood projects in Central Africa*. IUCN. https://books.google.co.ke/

Wren, S., & Speranza, C. I. (2010). The struggle to diversify rural livelihoods: bio-enterprise initiatives and their impacts on agro-pastoralists and pastoralists communities in the drylands of Kenya. *The European Journal of Development Research*, *22*(5), 751-769. https://doi.org/10.1057/ejdr.2010.42

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